

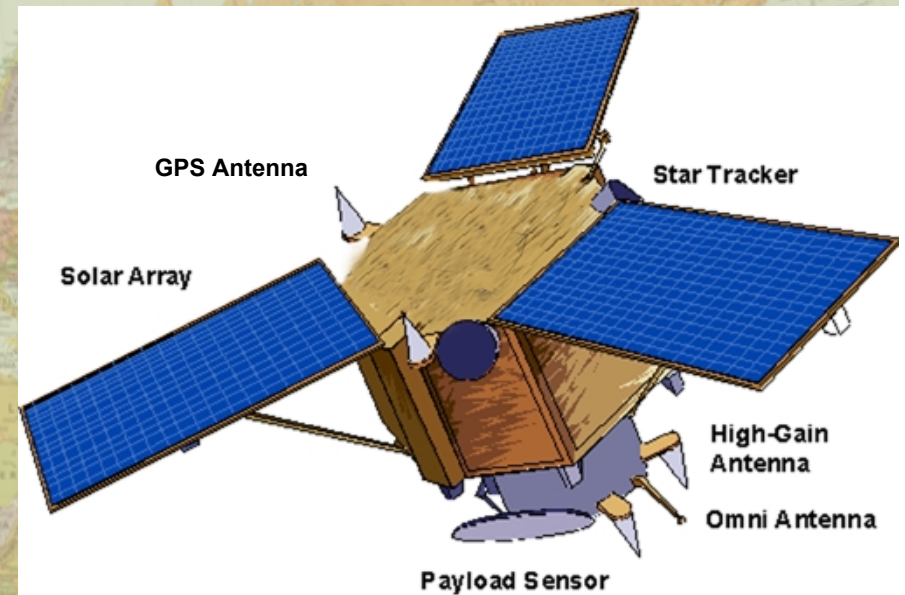


**SPACE
IMAGING**

Space Imaging IKONOS Overview

Gene Dial
Product Engineer

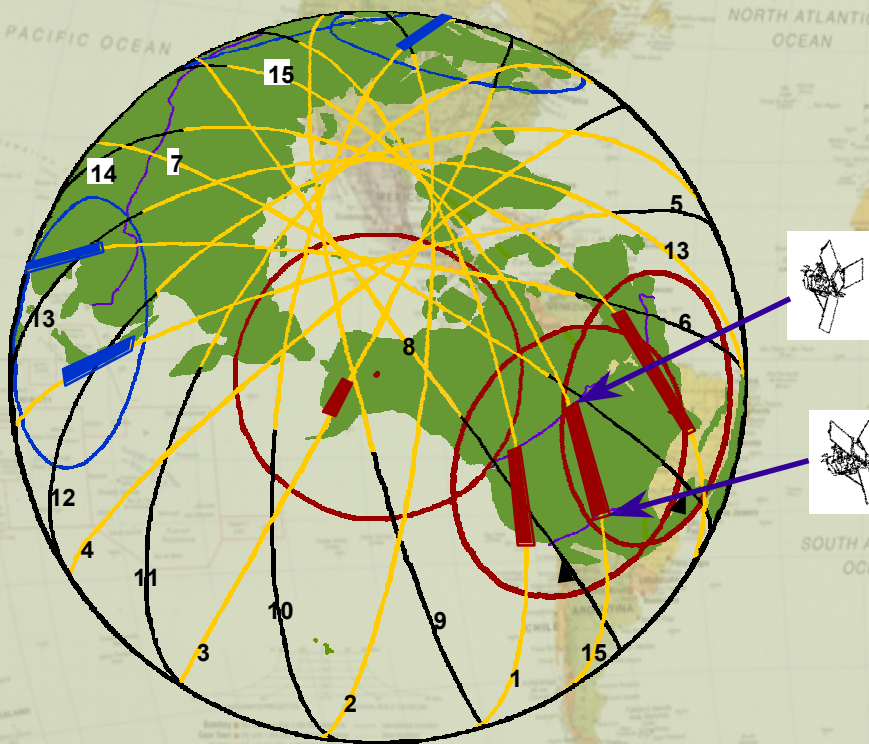
- 1m Ground Sample Distance in panchromatic band
- 4m ground sample distance in 4 multispectral bands (Blue, Green, Red, NIR)
- Simultaneous Pan and Multispectral collection
- “Pushbroom” collection with spacecraft motion scanning linear detector arrays along the ground
- Solid State focal plane for stable interior orientation
- GPS, Star Trackers, & Gyros for exterior orientation
- >11-km ground image swath at nadir
- Same pass stereo imaging
- 680 km sun-synchronous orbit for uniform lighting & global coverage
- 1m GSD images every 3 days
- Daily coverage with 2.7m GSD images



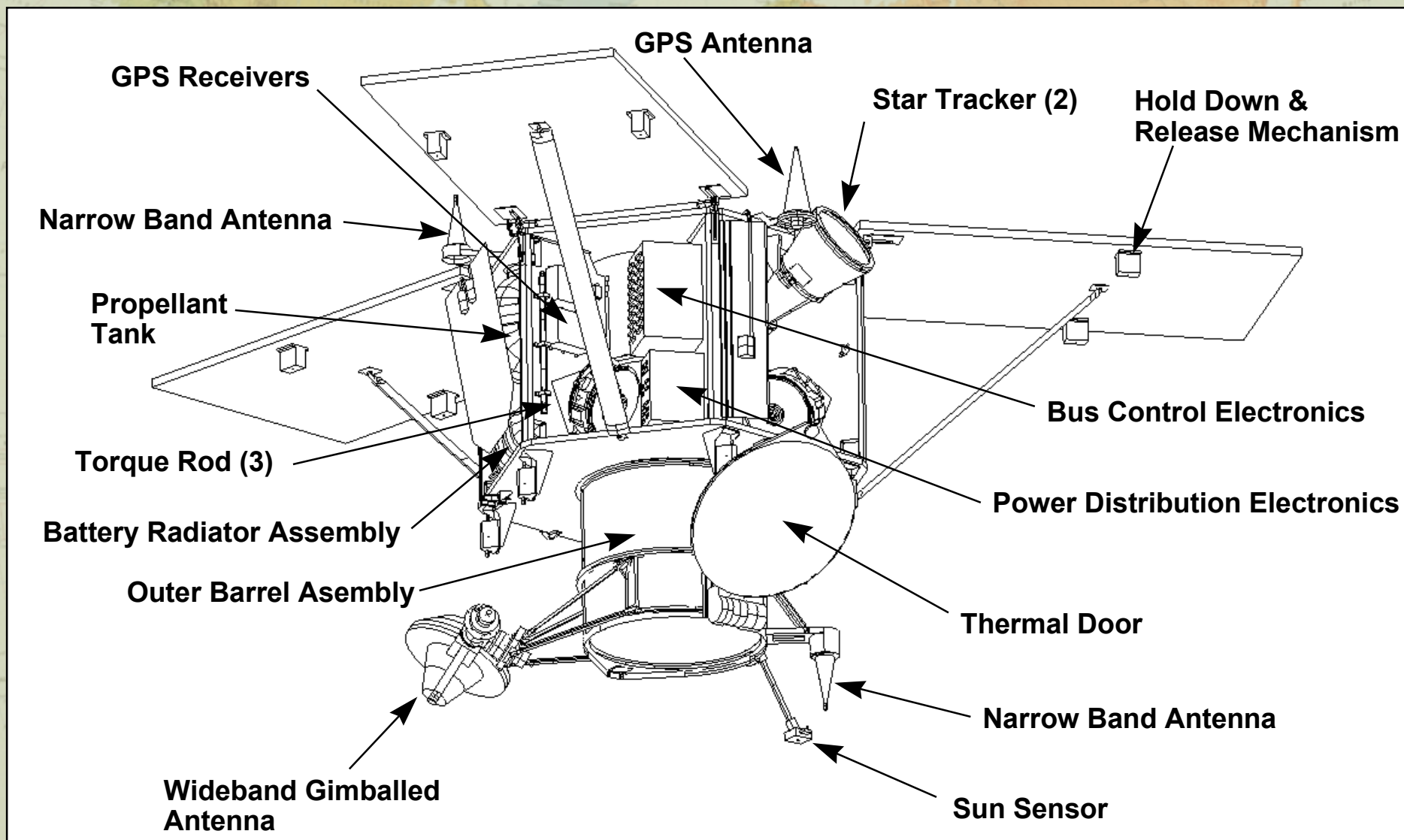
IKONOS satellite provides unique imaging capabilities

One Day during Mission Operations

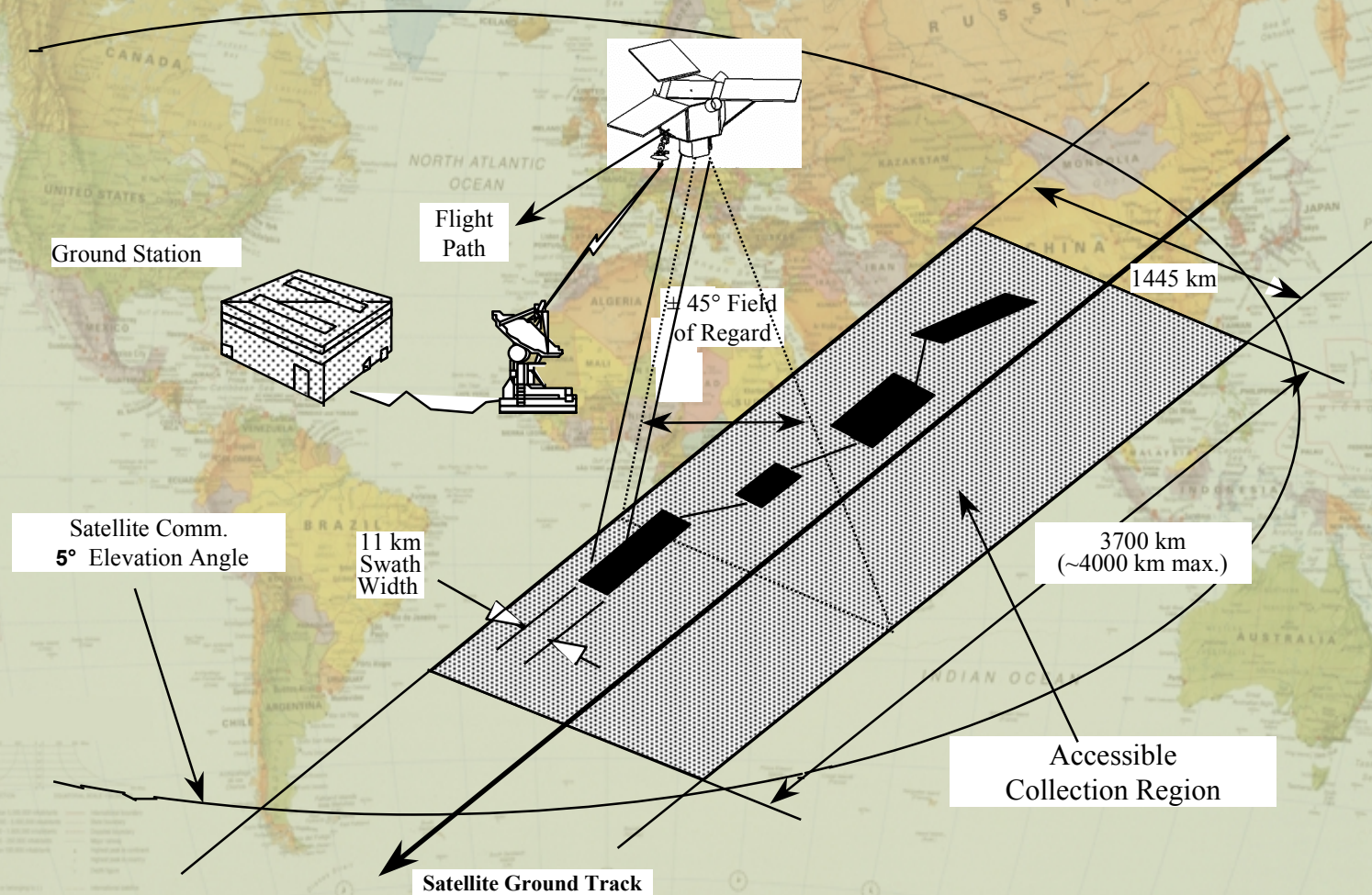
- **Sun Synchronous 680 km orbit**
 - **15 revs per day**
 - **Satellite overhead same time
10:00 - 11:00**
 - **Ground track “walks” to provide
near nadir viewing world wide**



IKONOS Spacecraft Configuration



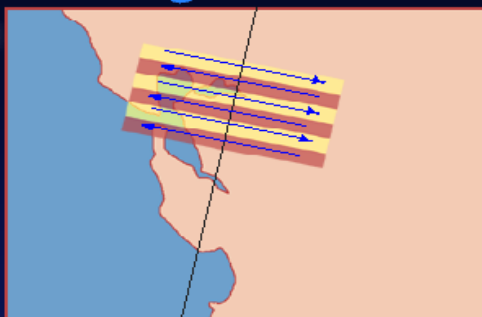
Spacecraft Maneuvering Capability



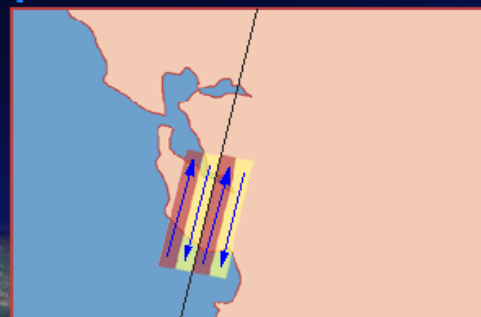
Tasking Single Pass Collection Options



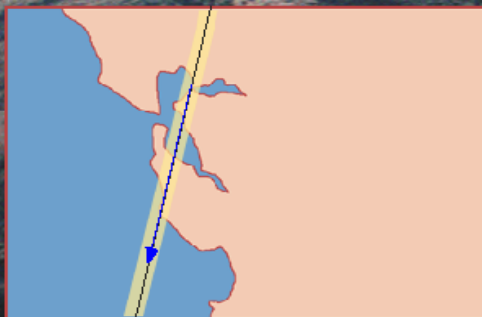
Tasking Single Pass Collection Options



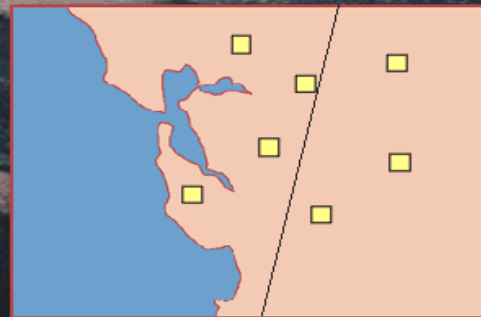
Cross-Scan Area Coverage
130 km x 76 km



Along-Scan Area Coverage
47km x 100 km



Along-Scan Single Swath
11 km x 1000 km



Single Scenes
11 km x 11 km